

# Work Order ID 67331

Tuesday, March 15, 2011 10:46:02 AM



ship friday

Page 1

Item ID: D3340-13

Accept



Setup Start



Revision ID:

Item Name: Aft Skidtube Protector

Stop



Start Date: 3/15/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 3/17/2011 Req'd Qty: 6.00



Customer:

Reference:

Approvals:

Process Plan: SNF

Date: 11-03-15 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3340

Rev B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3340 ☒ Dwg Rev: B ☐ Prog Rev: B ☐ 2-  
Debur if necessary

M 11 03 15 (6)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

M 11 03 15 (6)

120

0.00



QC8- Inspect parts - second check

QC

Memo ED 11  
SM-03

0.00

Quality Control

6 11 03 16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

[illegible]

Page 2

**Accept**

**Setup Start**

**Stop**

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 525

**Cust Item ID:**[illegible]

**Customer:**

**Reference:**

**Run Start**

**Approvals:** \_\_\_\_\_ **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

**Stop**

# Insp. Stamp

0.00

[illegible]

NC BRAKE

Brake NC

## Memo

0.00

Brake NC

Deburr if necessary ☐ Form on brake as per Dwg D3340 using Jigs DT 8326 and DT8261

8326  
SB 11/03/17

140

QC5- Inspect part completeness to step on W/O

0.00

...the ...

QC

## Memo

0.00

### Quality Control

150

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

...the ...

### Powdercoat

## Memo

0.00

## Powder Coating

START TIME: 11:30 OVEN TEMPERATURE: 325  
FINISH TIME: 12:20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 67331**

Tuesday, March 15, 2011 10:46:02 AM



Page 3

Item ID: D3340-13

Accept



Setup Start



Revision ID:

Stop



Item Name: Aft Skidtube Protector

Start Date: 3/15/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 3/17/2011 Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

6 0 11/03/17

170

Identify as per dwg & Stock Location: 300

0.00



Packaging

Memo

0.00

Packaging

11/3/17 60 SP

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/3/17 JF

MP  
11-03-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, March 15, 2011 10:45:49 AM

Page 1

Work Order ID: 67331



Parent Item: D3340-13



Parent Item Name: Aft Skidtube Protector

Start Date: 3/15/2011

Required Date: 3/17/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: A 05.11.10 Preliminary issue AP/EC  
IPP Rev:B Now on Waterjet 06-10-06 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M1010S20GA

Purchased

No

110

sf

169.8000

1.258

7.945263



1010/1025 SHEET



W 11-03-15

Location

Loc Qty

Loc Code

MAT

169.8

111410

73.8

116791

96

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 67331
<b>Description:</b> Aft Skidtube Protector		<b>Part Number:</b> D3340-13
<b>Inspection Dwg:</b> D3340	<b>Rev:</b> B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.250	+/-0.010	0.251	✓		Vern	MM-01
0.300	+/-0.010	0.300	✓		Vern	" "
0.50	+/-0.030	0.502	✓		Vern	" "
0.250	+/-0.010	0.250	✓		Vern	" "
2.315	+/-0.010	2.315	✓		Vern	" "
2.815	+/-0.010	2.816	✓		Vern	" "
1.625	+/-0.010	1.625	✓		Vern	" "
23.125	+/-0.010	23.125	✓		M.T	MM-02
26.625	+/-0.010	26.625	✓		M.T	" "
52.315	+/-0.010	52.315	✓		M.T	" "
55.815	+/-0.010	55.815	✓		M.T	" "
58.190	+/-0.010	58.190	✓		M.T	" "
61.000	+/-0.010	61.000	✓		M.T	" "
63.565	+/-0.010	63.565	✓		M.T	" "
0.040	+/-0.010	0.034	✓		Vern	MM-01

<b>Measured by:</b> M.M.	<b>Audited by:</b> [Signature]	<b>Preliminary Approval:</b>
<b>Date:</b> 11-03-15	<b>Date:</b> 11-03-16	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
A	10.06.07	New Issue	KJ	[Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

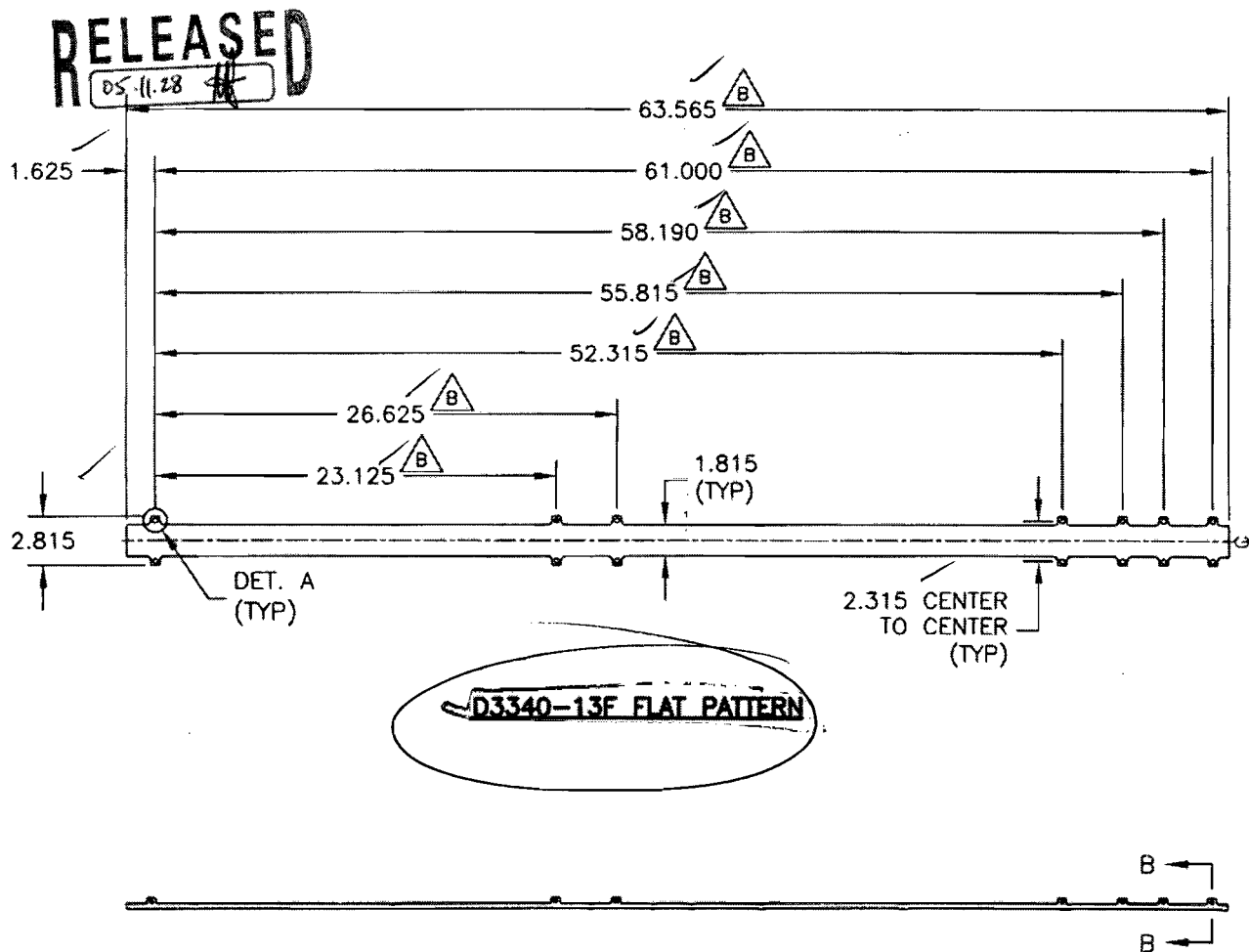
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3340	REV. B SHEET 6 OF 11
DATE 05.11.22	TITLE SKIDTUBE PROTECTOR		SCALE 1:10



**NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES COLD ROLLED STEEL 19 GAUGE (0.040 THICK)
- 2) PART IS SYMETRICAL ABOUT CENTER LINE
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP CORNERS 0.063 MAX

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

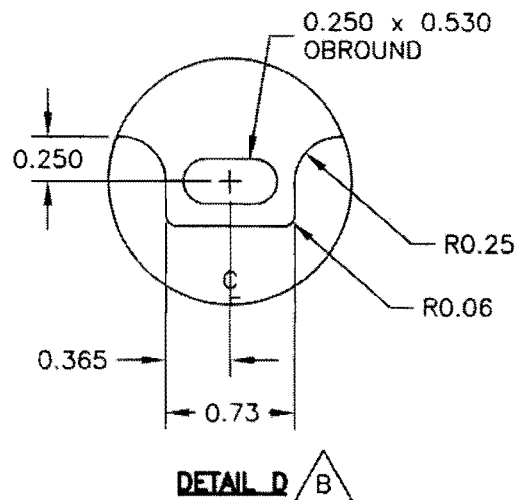
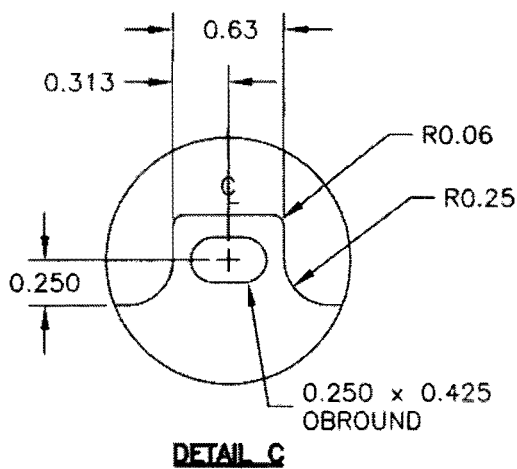
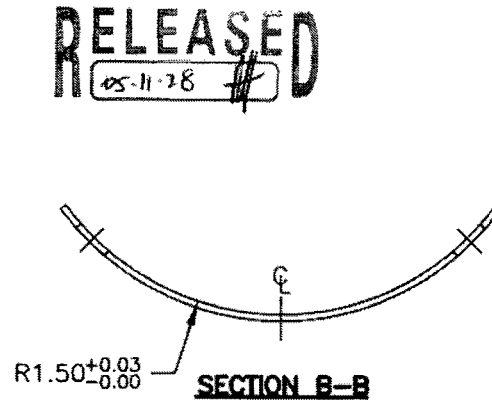
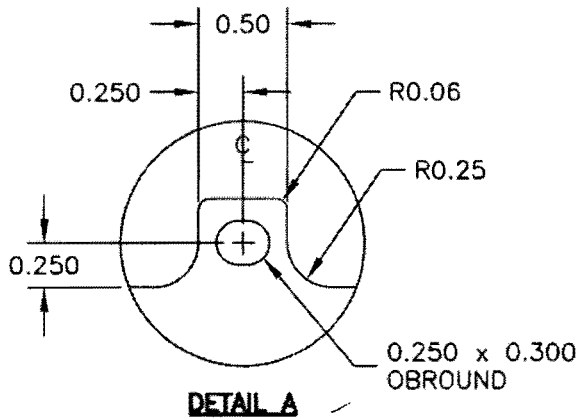
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3340	REV. B SHEET 11 OF 11
DATE 05.11.22		TITLE SKIDTUBE PROTECTOR	SCALE 1:1



# 67291

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries